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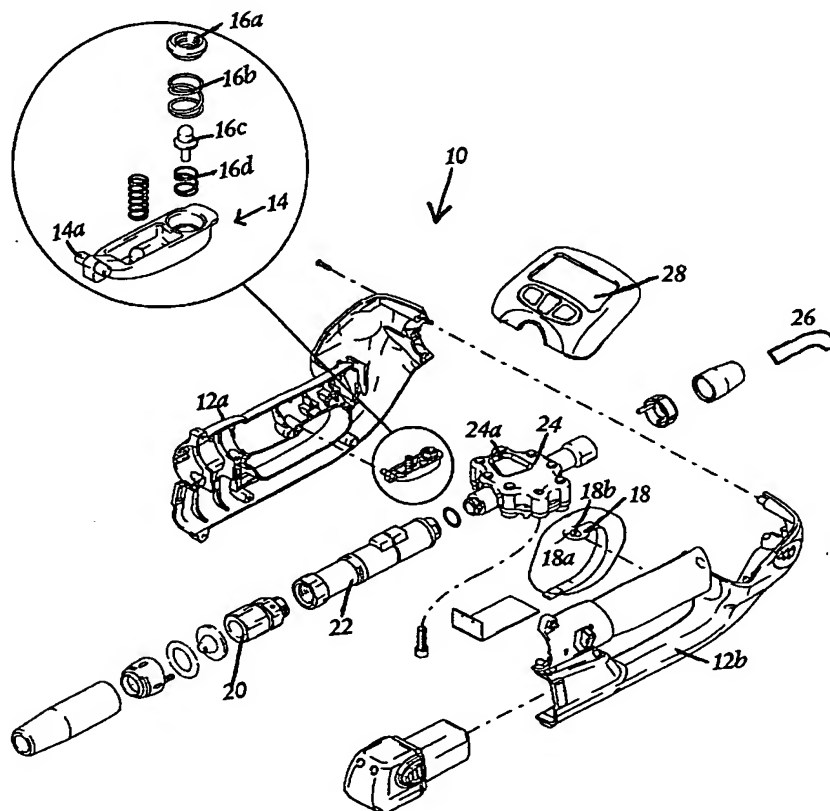
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(54) Title: MEMBRANE AND SOLENOID ACTUATED VALVE FOR DISPENSING



(57) Abstract: The invention replaces mechanical actuation of the valve (22) in lubricant dispense meters (10) to provide a software driven method of controlling the dispense of fluids. The design utilizes either a pressure sensitive membrane switch or a multi-position membrane switch (18) in conjunction with either a multistage solenoid actuated valve, a proportional solenoid actuated valve or an on/off solenoid actuated valve (22) to provide operator or programmed control of lubricant dispense frequency and flow rate via the meter's microprocessor.



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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 222/71, 504

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 222/71, 504

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,941,418 A (BOX et al.) 24 August 1999 (24.08.1999), See entire document.	1 and 2
A	US, 2,585,821 A (MUELLER) 12 February 1952 (12.02.1952), See entire document.	1 and 2
A	US 5,257,720 A (WULE et al.) 02 November 1993 (02.11.1993), See entire document.	1 and 2
A	US 4,955,507 A (KIRSCHNER et al.) 11 September 1990 (11.09.1990), See entire document.	1 and 2

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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